**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:
Con et al.

Application No.: 09/629,649

Filed: August 1, 2000

For: **POSTAL METHODS AND SYSTEMS
EMPLOYING DIGITAL
WATERMARKS**

Examiner: Y. Couso

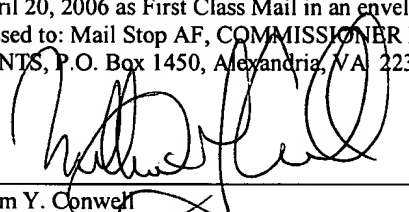
Date: April 20, 2006

Art Unit 2625

Confirmation No. 7630

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on April 20, 2006 as First Class Mail in an envelope addressed to: Mail Stop AF, COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450.



William Y. Conwell
Attorney for Appellants

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants request review of the appealed-from rejection in the above-identified application. No amendment is being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheets. (No more than five attached pages are provided.)

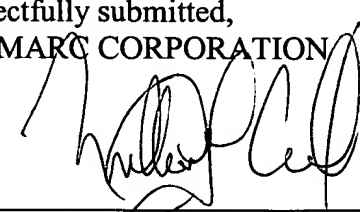
Date: April 20, 2006

Customer Number 23735

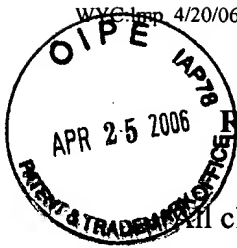
Telephone: 503-469-4800
FAX: 503-469-4777

Respectfully submitted,
DIGIMARC CORPORATION

By _____



William Y. Conwell
Registration No. 31,943
Attorney of Record



REASONS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

All claims stand rejected under § 103. (Claim 46 was earlier indicated as allowable by Examiner Cosimano, in a previously co-pending parent case – copied here to obviate a provisional obviousness-type double-patenting assertion). Many claims also stand rejected under § 112. The Board will reverse these rejections. A few reasons for reversal are noted below.

The appealed-from Action is the fifth in this application. (One appeal has already been taken – resulting in reopening of prosecution.)

The last three Actions have been issued by the present Examiner. In the currently-appealed-from Action, the Examiner has abandoned the anticipation rejection of independent claim 6 made in Actions #3 and #4 (which, in turn, was different than the rejections made in Actions #1 and #2).

In the Final Rejection, claim 6 stands rejected under § 103 over Adler + Leon.

Claim 6 *also* stands rejected under § 103 over Coopersmith + Leon.

Claim 6 *also* stands rejected under § 103 over Turho + Tonges.

The Board – a proponent of the MPEP’s admonitions that the Examiner should make just the *best* rejection, and that cumulative rejections should be dropped during an appeal conference – should be spared the need to review three such rejections.

As outlined below, none of the three would be sustained.

Regarding Adler + Leon, the Examiner evidences a misunderstanding of Leon’s teachings by the statement “*Leon discloses an envelope having encoded thereon a fragile digital watermark representing plural bits of digital data*” (citing lengthy portions of Leon’s spec). Leon does not teach a fragile digital watermark representing plural bits of digital data.

One aspect of the Examiner’s misunderstanding is confusion of traditional paper watermarks with digital watermarks.

Traditional watermarks are formed in the process of making paper, e.g., by altering the density or thickness of a paper medium in a pattern that is visible in certain lighting. Digital watermarks, in contrast, refer to steganographic techniques in which digital data is encoded in hidden fashion in a host medium without apparent trace of any encoded information.

Leon refers briefly to “*marks such as watermarks,*” e.g., as follows:¹

¹ Leon, patent 6,701,304, col. 2, lines 39-46.

The postage labels can also include identifier information that exhibits special characteristics and that can be used for authenticating the indicia. The identifiers include, for example, fluorescent strips, marks such as watermarks, micro printing, imprints using special ink and/or taggants, and other features, as described below. The identifier information assists in the prevention and detection of fraud, again as described below.

Leon teaches that his label comprises three portions: (1) a human-readable portion; (2) a machine-readable portion; and (3) an identifier portion.² “Marks such as watermarks” are identified in the third class – an “identifier portion.” He does not teach that the “identifier portion” is “machine-readable.” Indeed, “machine-readable” portions comprise his *second* class.

Conventional paper watermarks have been used for centuries to identify the manufacturer, or grade, of paper (including postal stamps), and as an aid in detecting/preventing forgery. An artisan reading Leon would understand that he is speaking of such conventional paper watermarks when he speaks of use of “marks such as watermarks” in his “identifier” (not “machine-readable”) portion.

Another aspect of the Examiner’s error is that nothing in Leon teaches or suggests any “fragile” qualifier to his cited “watermark.” (Appellants repeatedly asked the Examiner to identify what element in Leon comprised a fragile digital watermark: “*Does the Office regard Leon’s “micro printing” as a fragile digital watermark? Or is in the invisible ink printing? Or is it the microscopic taggant identification beads that may be mixed into Leon’s ink? Or it is something else? What “plural bits of digital data” does the asserted feature in Leon represent?*”³ The Examiner gave no answer.)

The rejection is thus premised on errors of fact. As such, *prima facie* obviousness has not been established.

Moreover, it will be recognized that appellants’ original fragile watermark - as formed (e.g., by printing) on the claimed envelope - conveys plural bits of digital data. Only when

² See, e.g., Leon abstract, 3d sentence. See also col. 2, lines 51-53.

³ October, 2005, Amendment, page 11.

scanned and re-printed (as by photocopying) does appellants' watermark not survive. In contrast, Adler's fragile watermark is in the compressed *digital* realm. There is no indication that Adler's technique would survive the vagaries of printing. Rather, it appears the act of printing Adler's "original" would corrupt his watermark, and frustrate any ability to recover the intended plural bits of digital data therefrom. Thus, Adler's technology – if employed in Leon's application – would not convey plural bits of digital data; they would be lost by the very act of printing the original.

Critically, the Action fails to detail any motivation to combine the references. After offering a (mistaken) predicate to establish that the references *might* be combined ("*Adler and Leon are combinable because they are both directed to techniques for protecting the security of digital representations using watermark technology*") the Action fails to provide any reason why an artisan would seek to combine such references in the manner asserted. The Action just baldly states:

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Adler with Leon to obtain the invention as specified in the claims.

Obviousness is not thereby established. See *In re Dance*, 160 F.3d 1339, 1343 (Fed. Cir. 1998): "When the references are in the same field as that of the applicant's invention, knowledge thereof is presumed. However, the test of whether it would have been obvious to select specific teachings and combine them as did the applicant must still be met by identification of some suggestion, teaching, or motivation in the prior art, arising from what the prior art would have taught a person of ordinary skill in the field of the invention."⁴

The rejection of claim 6 over Coppersmith + Leon is similarly flawed.

The rejection of claim 6 over Tuhro and Tonges is also deficient. Tuhro teaches encoding a zip code in a postal mark, using Xerox's glyph technology.

The Examiner again misunderstands the art, as evidenced by the erroneous statement:

⁴ Emphasis added.

[Tuhro's] encoding of data, in an image, is a fragile digital watermark, which would not be reproducible by the scanning and copying elements most photocopiers.

To the contrary, Tuhro himself, through the Xerox patent 5,315,098 he incorporated-by-reference (as well as other Xerox glyph references), teaches that the data encoded by glyphs is detectable after photocopying (indeed – this is a touted feature of the technology).

And again, as in the other § 103 rejections, the Action is devoid of any rationale concerning the suggestion, teaching or motivation in the prior art that would have led an artisan to the claimed combination. *Prima facie* obviousness has not been established.

The rejection of claim 35 over Zhao and Leon is similarly flawed. Again, the rejection is based on an erroneous understanding of Leon (*e.g.*, as teaching a fragile digital watermark representing plural bits of digital data). Again, after mistakenly indicating that both Zhao and Leon are in the same field, the Action failed to cite any suggestion, teaching or motivation in the art leading to their combination in the manner proposed. Instead, just a bald statement of obviousness is offered.

Ditto for the rejection of claim 35 over Gasper and Leon. Again, the Action states “[I]t would have been obvious ...” but fails to provide any rationale therefor.

Regarding the withdrawal from consideration of recently-submitted claims 34, 36-45 and 47-51, the Examiner is certainly permitted to do so – *provided* the requisite showing that such claims are “distinct” is properly made. The MPEP explains the procedure to be followed by the Examiner in establishing distinctiveness. The Examiner has not made the necessary showing in the January, 2006 Action. (Such matter will be raised on Petition at a later date, if maintained.)

In considering § 112 support for the limitation that the watermark and franking mark are printed by the ‘same printer’ (claims 20-22), the Examiner neglected to consider the support identified by appellants at page 2, lines 1-2, and page 5, lines 16-19, of the specification (*see* Oct. 2005, Amendment, page 8), which properly supports the claim limitation.

Another error concerns support for the dots-per-inch limitations of claims 20-22. As acknowledged by the Examiner, the specification discloses printers having print resolutions of 100 and 300 dots per inch (dpi). Claim 22 calls for a printer having a print resolution of 300 dpi, or less. Claim 21 is similar, but specifies 600 dpi, or less. Yet the Examiner asserts that these limitations are not supported.

MPEP § 2163.05 states *"To comply with the written description requirement... each claim limitation must be expressly, impliedly, or inherently supported in the originally filed disclosure."* Here "300 dpi or less" is expressly supported; "600 dpi or less" is inherently or impliedly supported - if not expressly supported.

(Moreover, the Examiner disregarded incorporated-by-reference⁵ application 09/074,034 (filed May 6, 1998, now patent 6,449,377), which teaches (at col. 16, lines 5-7) "photographic quality color ink-jet printers are commonly available from Hewlett-Packard Co., Epson, etc. for under \$300." Submitted as Exhibit A to the February, 2005, Amendment was a datasheet for the HP DeskJet 720C/722C printer, which characterized it as *"a wildly successful printer for HP. Many millions of them were sold between 1998 and 2000.... The actual street price varied between \$249 and \$299."* This printer had a resolution of 600 dpi. Again proper support is thus provided.)

In connection with claims 25 and 31, the Examiner disregarded the teachings of incorporated-by-reference patent 6,614,915 (identified in the Oct. 2005, Amendment, page 9).

Regarding the § 112 rejection of claims 26 and 32, the Examiner seems to look for the literal text from the claim to be found in the spec. The Board does not apply such a standard. Fairly read, the specification properly supports such claims.

For brevity's sake, the foregoing discussion has reviewed only certain of the claims pending in the application, and only selected points have been reviewed in connection with each. Many other points that might have been raised concerning the claims, the art, and the rejections, have not been belabored.

Nonetheless, the foregoing brief observations are believed sufficient to establish that the outstanding rejections would not be sustained by the Board.

⁵ Appellants' other applications were referenced at page 1, lines 4-12 of the present specification, and were incorporated-by-reference through language found at page 11, lines 7-9.